

Group Number and Name	Dec14-12
Client/Advisor	Bong Wie
Attendees/Role	Sean Nichols/Leader, Chi Hoe How/Communication, Yishu Mei/Webmaster/ Meng Lu/Advisor

Past Week Accomplishments

- **Chi Hoe** - Implemented AXI4-Stream passthrough module. Successfully inserted into video pipeline without hindering video performance.
- **Sean** - Successfully put together higher level blocks along with testbench modules. These include :
 - Distance Calculator
 - Min finder
 - K-means grouping (RAMs + distance calculators + min finder + FSM)
 - Accumulator + match counter
 - Averager (Accumulator + divider + FSM)
 - K-means FSM (K-means grouper + Averager + FSM)

Plan for Coming Week

- **Sean** - Assemble the K-means full K-means datapath. Generate testbench files to continue to test each step along the way.
- **Yishu** - Get stepper motor acceleration to run smoothly.
- **Chi Hoe** - Create clocked process on video passthrough module to continue to show that it will not hinder video performance.

Pending Issues

- Chi Hoe and Yishu are still having problems getting the stepper motor to run smoothly with third party code. A look up table method is being considered
- It has been noted that we need not use Euclidean distance for our calculations as our design does not need to know exact distance numbers. All we need is to see which number is larger. There is no longer any need to use the Multiplier DSPs or any square root module.

Individual Hourly Contributions

<u>Name</u>	<u>Hours this week</u>	<u>Hours Cumulative</u>
Sean Nichols	23	108
Chi Hoe How	15	70
Yishu Mei	11	67

Comments and Extended Discussions

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